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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|---------------------|------------------|
| 09/771,983 | 01/30/2001 | Junichi Hayashi | 35.C15073 | 9440 |
| 5514 | 7590 05/12/2005 | | EXAM | INER |
| | ICK CELLA HARPE | COUSO, YON JUNG | | |
| 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 | | | ART UNIT | PAPER NUMBER |
| | • | | 2625 | - |

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|
| | 09/771,983 | HAYASHI ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Yon Couso | 2625 | | | | |
| The MAILING DATE of this communication Period for Reply | n appears on the cover sheet wi | th the correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATION Extensions of time may be available under the provisions of 37 CI after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event, however, may a reson. a reply within the statutory minimum of thirty eriod will apply and will expire SIX (6) MON statute, cause the application to become AB. | eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | 25 February 2005. | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ | This action is non-final. | · | | | | |
| , , | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1-36 is/are pending in the application 4a) Of the above claim(s) 15-23 is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-14, 24-36 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction a | ndrawn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Exa | miner. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to | ** ' | · · | | | | |
| Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the | • | • • | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority document of the priority document of the copies of the priority document of the copies of the application from the International But * See the attached detailed Office action for a second of the copies of the attached detailed Office action for a second of the copies of the attached detailed Office action for a second of the copies of the attached detailed Office action for a second of the copies of the attached detailed Office action for a second of the copies of the copies of the attached detailed Office action for a second of the copies of the copies of the copies of the priority document of the copies of the priority document of the copies of the c | nents have been received. nents have been received in Appriority documents have been ureau (PCT Rule 17.2(a)). | oplication No received in this National Stage | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) | | ummary (PTO-413) //Mail Date | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SI Paper No(s)/Mail Date | <i>'</i> | formal Patent Application (PTO-152) | | | | |

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1. Applicant's arguments filed February 25, 2005 have been fully considered but

they are not persuasive.

a. The applicant argues that the Rhoads and/or Cox et al reference do not teach

employing the results obtained at a first information extraction step to determine

whether a process for extracting second information from an image is to be performed

The examiner disagrees. Cox discloses employing the results of a first extracting step

(Group of G separated into three groups based on the frequency; column 8, lines 36-38

and lines 57-58) to determine whether a process for extracting second information from

an image is to be performed (based on the G Group, it determines which G values to be

used and does not compute further processing for other G Groups, in turn, it determines

whether a process for extracting second information from an image is to be performed

(column 8, lines 36-67).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, 11-14 and 24-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads (US 6,122,403) in view of Cox et al. (US 6,154,571).

The arguments presented in paragraph 1 above as to the applicability of the references are incorporated herein.

Regarding claim 1, Rhoads discloses a digital watermarking system for linking computer system using the information in data objects comprising the steps of:

a first information extraction step of extracting information including a registration signal (column 10, lines 21-43), including a registration signal used to correct the geometrical distortion of an image.

Rhoads discloses the use of second information (figure 24, elements 970 and 972) without specific details regarding the determination step of employing the results obtained at the first step.

In the same field of endeavor, however, Cox discloses a robust watermarking system comprising a determination step for employing the results obtained at the first step to determine whether second information is to be extracted (column 8, lines 52-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the second step for extracting information as taught by Cox in the watermarking system of Rhoads because Cox provides Rhoads with a robust watermarking system that provides much better control over image fidelity

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and is adaptable so that the model of the human visual system and the techniques used for handling attacks on the image information can be changed later without having to change the detector.

As to claim 2, Rhoads discloses the first information and the second information are embedded in the image as invisible or less visible electronic watermarks (column 71, lines 1-35).

As to claim 3, Rhoads disclose the division step for dividing the image and selection step for selecting the block (figures 21A and 21B).

As to claims 4-5, Rhoads discloses the first information indicates the image includes a specific image (column 29, line 61 through column 30, line 60).

As to claims 6-8, Rhoads discloses the first and second information being added to components of the image that are easily discerned by a human's eyes to identify paper currency, securities or a copyrighted image (column 59, lines 10-65). Additionally, such watermarking systems are routinely used for paper currency and copyrighted material as being also disclosed by Cox (see column 1, lines 8-60) and other prior art made of record in the instant application.

As to claim 9, Rhoads discloses a determination step of determining whether the specific image is included; an image process is performed based on the image (column 20, lines 6-44).

As to claims 11-14, Rhoads discloses the first information is smaller than the second information, requires shorter time than the first and present in the greater area (figure 18, elements 852 and 864, figure 27A and figure 42).

As to claims 24-34 and 36, claims 24-34 and 36 recite substantially very similar limitations as that of claims 1-9 and 11-14 and are similarly analyzed.

3. Claims 10 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads (US 6,122,403) in view of Cox et al. (US 6,154,571) as applied to claims 1-9, 11-14 and 24-34, 36 and further in view of Horigane (US 6,334,721).

Regarding claims 10 and 35, while Rhoads discloses the use of printers and scanners (column 10, lines 5-50) without specific details regarding the method of claim 1 being performed by printer driver.

In the same field of endeavor, however, Horigane discloses a printing system wherein the method of claim 1 is being performed by a printed driver (column 5, lines 10-45 and column 8, lines 41-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the printer driver as taught by Horigane in the watermarking system of Rhoads because the printing system of Horigane enables application data to be printed out at any printer even if machine-readable code is embedded in the application data.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (571) 272-7448. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

May 2, 2005